

JUNE - 1967

VOLUME 17 - - No. 2

*Canadian
Home
Economics*

JOURNAL

Published by CANADIAN HOME ECONOMICS ASSOCIATION

CANADA'S CENTENNIAL YEAR

1867 - 1967



*What do you tell
a girl with a weight problem
who likes burgers, pop, shakes, french fries,
ice cream, wild desserts and boys?*

**NEW! Free wall chart
from CARNATION tells
your students...**

about calories and calorie counting • about weight control
• about sensible snacking

For your free copy—just send a postcard with your name, school and address to: Mary Blake, Home Service Director, Dept. IM-1-67, Carnation Company Ltd., Aylmer, Ontario.



JOURNAL

June, 1967

Volume 17, No. 2

EDITOR

MISS DONNA M. BAXTER
196 Enfield Crescent
St. Boniface 6, Manitoba

ASSOCIATE EDITOR

MRS. JUNE JACKSON
21 Mohawk Bay
Winnipeg 6, Man.

FEATURE EDITORS:

MISS EMERIEUX ROUSSE
DR. DONIS RUNCIMAN

BUSINESS MANAGER

MRS. ELIZABETH SHANNON
School of Home Economics
University of Manitoba
Winnipeg 19, Manitoba

ADVERTISING

MRS. SHEILA BLOOMER
Box 266, Winnipeg 1, Man

Subscriptions and change of address should be mailed to Canadian Home Economics Association, National Office, 151 Slater St., Ottawa 4.

Subscription rates: \$2.50 per year or 65 cents per single copy.

Application for membership in the Association should be sent to National Office. Membership fee is \$15.00 due May 1st.



ARTICLES

- HOME ECONOMICS IN KENYA
Bertha Bowman Peterson 31

- WITHER OR WHITHER THE FAMILY
Grace Duggan Cook 36

- APPRECIATION DES PROPRIÉTÉS
ORGANOLEPTIQUES DES ALIMENTS
Elizabeth Larmond 42

- QUALITY CONTROL IN FOOD RETAILING
Norman Logan 44

- F.A.O. FEATURE—22 New Books for Africa 48

DEPARTMENTS

- WHO'S WHO 35

- EDUCATION COMMITTEE REPORT 40

- ABSTRACTS OF CURRENT LITERATURE 50

Published Quarterly by
CANADIAN HOME ECONOMICS ASSOCIATION

Printed by
The Public Press Limited, Winnipeg 21, Manitoba.

Authorized as second-class mail, Post Office Department, Ottawa,
and for payment of postage in cash.



A Message from the President

What is on the international horizon for Home Economics?

Mrs. Oddie reports a very good response to the request from the external aid department to supply small equipment for schools in the Caribbean. Some groups have already purchased and sent the items on the list sent to them. Others have sent a cheque to the Caribbean Trust Account. Is your group among these? One College Club has participated in the project.

Canadian Home Economists are proud to have Marjorie Kennish of New Brunswick as Vice-President of the International Federation of Home Economics.

I.F.H.E. has for the first time sent a report to collective members. This has been made possible by the establishment of a permanent office in Boulogne, France. Canada has six collective members, geographically distributed, organized by the C.H.E.A. liaison, Dr. Margaret McCready. Two French associations also hold collective memberships.

The aim of I.F.H.E. is to promote, in all countries, the development of Home Economics education. Many of us become absorbed in personal interests and local matters and forget that there is a worthwhile world organization that needs our support.

Letters of application to attend the 1968 International Congress in Bristol, England, are due at the C.H.E.A. national office. The theme of this eleventh congress is "Home Economics in the Service of International Co-operation."

Why not come to the C.H.E.A. "Horizons 68" in Regina and join a charter flight to England?

Home Economics in Kenya

by BERTHA BOWMAN PETERSON.

Mrs. Peterson, B.Sc.(H.Ec.) Manitoba, M.S. Minnesota, at present is with her husband Dr. R. F. Peterson who is on a special appointment for the Department of External Affairs at the Plant Breeding Station Njoro, Kenya. Her biographical sketch may be found in C.H.E.J. Vol. 9, No. 4.

It is exciting to be in Kenya at this time, when the country seems to be gathering its forces to advance in all phases of its life, to build a new nation out of its many tribes and peoples, and to step forward to take its full place among the world's family of nations. Kenya's President, Mr. Jomo Kenyatta, has said, "We are passing through a new era in the history of Kenya. This may be called the 'Nation Building Era'," and he has called upon his people, men and women, to give the best of their strength, minds, and hearts to that building.

Home economics is one of the many facets of this forward thrust. It goes forward under various names and auspices, adapting and applying the science, arts and skills of its discipline to the many problems to be faced.

The problems are many and complex. To begin with the people, some 60 African tribes are listed in an official atlas of Kenya, and each has its separate language, staple food, beliefs and taboos. The staple food may be banana, cassava, maize, beans, blood and milk mixed in a gourd (Masai), or meat and honey (Ndorobo). One taboo met with is, that women should eat no eggs, lest they become sterile. Then there is the Asian community, among whom are Hindu, Muslim, Sikhi, Goan, and other groups, each with its religious and traditional beliefs and customs that affect food choice and preparation. In addition, there is the multilingual European group. Obviously, no one simple home economics program can meet the needs of all. Any program, then, needs to be carefully thought out, and planned so as to present a framework of universally valid principles in a way that can be used to cope with the variety of needs and circumstances that are part of the Kenyan scene.

Among this diverse people, some of the more serious problems are related to the extreme poverty seen in some areas, in-



The first African woman appointed to the Domestic Science staff, University College, Nairobi (center) is a graduate of that school.

adequate food, disease, family relations — and there are plenty of others!

Many African diets are deficient in total protein, as well as in high quality plant (peanuts, soy beans, oats), and animal (meat, fish, eggs, milk) proteins. Vitamins A and C, and fats, are often in short supply, as well as calories. It is not surprising, therefore, that one finds kwashiorkor, pellagra, and general malnutrition, as part of the disease problem. Other diseases prevalent are dysentery, yellow fever, poliomyelitis, tuberculosis, and the parasite-caused diseases such as tapeworm, hookworm, malaria, and bilharziasis.

No nation can be great, whose people's lives are not based on a strong family life, and integrity of character. In the rapidly changing conditions of Kenya there is a change in the tribal and family control of the individual, and moral standards seem to be more lax in some areas. Many men leave their lands in the Reserves, to become urban wage earners, leaving their wives to cultivate the shambas and rear the children alone, except for the short annual vacation of the wage earner. This practice is not conducive to strong and happy family life; yet one can understand, on the other hand,

the lure of a money wage, and the need for it to pay school fees, and to meet the family's need for cash, and, on the other hand, the necessity of keeping the family home and land as a place of retirement after working days are over.

Many home economists — domestic science people in Kenya — are busy doing their part in trying to improve conditions — trying to teach girls and women to make the best use of the resources they have, in order to improve life for all.

Maendeleo ya Wanawake (Progress of Women) is an organization associated with, and given some financial aid by, the Associated Country Women of the World. Their aim is to improve the conditions of the rural women of Kenya. They have 2,500 clubs throughout the country to carry on their drive for literacy and better child care. A European trained nursery school worker has recently been engaged to organize child care centers. Maendeleo ya Wanawake also train women to make high quality articles such as bead work, woven reed baskets and mats (colors and designs are beautiful!) dolls dressed in tribal costumes, etc., for sale. In fact, some of their work may be seen in Canada at Expo '67.

In many municipalities there are Home-craft Training centers. The one at Njoro is operated by a Director, Mrs. Janet Ndegwa, who trained first as a nurse, then as a social worker in U.K. Three 3-month courses are given yearly; 60 students are accepted for each; 153 completed the course in 1966. There is no educational requirement, only one illiterate in the current class, whose ages range from 17 to 30 years. Students are grouped according to education for instruction, Swahili being the language used. Students live in residence, may bring 1 child, if it is 1 year or more old, but not over 5; husbands may visit their wives on week ends, but may not sleep at the school. All practice materials are provided, as well as food. The curriculum includes instruction in all phases of homemaking — nutrition and food production, choice, and cookery; study of fabrics, garment construction, repair, laundry; home management, including budgeting a monthly income of 120 shillings! — child care, and sanitation. In addition, instruction is given in personal

hygiene, use of forks and knives at table, "housewifery" — i.e., how to keep the house clean, even with mud floors; to keep all food covered; the use of a "meat safe," a wooden cupboard with wire-screen sides, used in lieu of a refrigerator — so many things that make for clean and healthy living, with adequate food, well prepared. This is done at a minimum cost, using locally available foods and materials. Asked if the course was well received, and the new knowledge put into practice, Mrs. Ndegwa said, "Yes! I get a real thrill when the husbands of my students call to thank me for the improvement in their homes."

At the "Farmers' Training Schools," a women's course is often given, sometimes of 2 weeks' duration, sometimes only a few days of intensive instruction on a particular subject — perhaps beekeeping, how to care for milk, or how to combat fecal-borne infection by building adequate latrines, properly screened, so placed as not to contaminate the water supply. At these schools, there are often mixed classes of men and women, where the idea of a husband-wife team who work together for the good of the family, and consult together in the making of decisions, and allocation of family income, is presented. This is new to many African families, but is being accepted gradually, especially among the younger and the better educated ones.

The Department of Agriculture's Home Extension service, started in 1963 under the directorship of Miss Grace Wagemma, is another channel for home economics teaching. Miss Wagemma is a home economics graduate from Howard University, U.S.A. She was picked for her job after graduation, then given an intensive 6 months of training in extension work that took her out into the field with extension workers in many areas in the southern states. The department has 32 home extension assistants, and 200 field staff workers. Assistants must have finished secondary school; some been trained abroad as well. There is a fairly rapid turnover, as other employers offer them bigger salaries! The field staff workers are a more varied group. Some have finished secondary school, but mature, experienced women, with influence in their communities, may be accepted with only primary school education. These workers come from all



Tomatoes in an African garden. The extension worker encourages the planting of an assortment of vegetables in gardens close to the homes.

over Kenya, so that, among them, many of the vernacular tongues are spoken; this makes it possible to reach illiterate persons, familiar with neither Swahili nor English. The program covered by the extension department is much the same as that of the homecraft centers. It is carried out through visits to individual homes, by 1- or 2-day, or longer, courses, at population centers, and by demonstrations and lectures on request.

The teaching aids used are familiar to any home economist. They include food-group charts, how-to-make-and-do diagrams, samples to study and copy, and wall charts showing a sequence of events, such as the one showing the life-cycle of the tapeworm. There are booklets and bulletins written especially for East Africa by persons familiar with its needs; and many, many publications of all sorts, from countries where this type of teaching has a longer history than it has here in Kenya. This material can be simplified if need be, adapted for use in this setting, or translated into Swahili.

Kenya has a country-wide home economics curriculum for use in standards (grades) IV to VII of the primary school, and an optional course for the four years of secondary school. Lack of teachers, lack of space, lack of interest or lack of funds may result in the courses not being offered in some schools. Of the girls who pass their final primary school examinations (K.P.E.), not all can be accepted in secondary schools — there are not enough schools, nor enough teachers, to accommodate all qualified students. Of the girls who do go to secondary schools, not all elect home economics; and of all who do, not all finish the course — as happens

in other countries; so only a very small per cent of Kenyan girls receive the possible 8 years of home economics schooling.

These courses are under the supervision of a woman education officer. For the Rift Valley Province, this is Miss E. W. Murai, with offices at Nakuru. She was trained in Britain. The classroom teachers are graded as: P₁ — teachers who have passed their K.P.E., and have had a 2-year teacher training course; P₂'s have K.P.E. plus 2 years of secondary school, plus 2 years at Teachers' College; and P₃'s have a 5th and 6th year at secondary school (the Cambridge School Certificate, or C.S.C.), plus 2 years at Teachers' College. These are primary school home economics teachers. For secondary schools, teachers are designated as S₁; some are graduates of the domestic science department of Nairobi University College, or of foreign institutions. Some of those graded P₁ qualify for S₁ by taking the second 2-year part of the secondary school course, or, alternatively, 3 years at Teachers' College after obtaining their C.S.C. Home economics teachers seem to be in perpetual short supply.

Excellent text books, concerning all phases of homemaking, are available, written by competent, experienced teachers who have taught in East Africa. As much is taught as is possible in primary school, because so many girls get no further training. The text books are used by primary and secondary school teachers, and as reference books in secondary school libraries. They are well prepared, well illustrated, and cover a comprehensive course in home economics. Asked if home economics teaching seemed effective, Miss Murai said "Oh, yes! The girls like to practice at home what they learn at school. They teach their mothers."

Karen College of Nutrition and Domestic Science accepts girls who have their K.P.E. Karen House, and its 36 acres (the former home of the Danish author Karen Blixen, who wrote under the name Isak Dinesen) was given by Denmark to Kenya as an Uhuru (Freedom) gift in 1963. The Danish Government provides the buildings and the operational costs for five years. There is a dormitory block of 32 single rooms, and

common rooms; and classrooms and laboratories to accommodate 60 students. The main course (of 6 months) emphasizes nutrition and foods as the main part of a twelve-subject course that includes English, Swahili and arithmetic, as well as home management and accounts, practical work in garden and kitchen, homecraft and sewing and home nursing. The course is looked upon as pre-training for future nurses, teachers, and community development officers. Shorter courses are given as in-service training, sometimes as further training for persons who are already in such work.

University College, Nairobi, offers a 3-year domestic science course for the Teacher's Certificate of the School of Education, Manchester University, England. Miss E. Ricketts,* B.Sc., London, Teacher's Diploma, London, M.R.S.H., is the Principal; there are 5 instructors; subjects such as chemistry, physics, biology, etc., are taught in other faculties of the College. The change to a degree course is under discussion.

The department is housed in pleasant, modern rooms fashioned from several smaller ones, equipped adequately for teaching home economics. The class in pie-making was in session when we were there; the jam products of the previous day were most attractive, as were the rooms for clothing-related work. This course attracted 206 applications for the 24 places available for new students. The course is geared to the special needs of Kenya, and the need to satisfy the academic standards of an institution of higher learning. Classes in education subjects are given. The students spend 3 periods of 1 to 1½ months in observing experienced teachers at work in the classrooms; teaching under supervision, and teaching a full program on their own. Their courses are designed to acquaint them with all types of equipment in use. For example, food may be cooked in clay pots balanced on stones (not often nowadays); over a charcoal brazier; on a stove improvised from old tin cans; on a stove using wood, kerosene, or

bottled gas; or with electricity. In this way students learn to cope with whatever type of equipment they meet in their after-college jobs. This type of adaptability is an asset in much of the home economics teaching.

That this department has reached a high standard is attested by its recognition by the School of Education of Manchester University, for its Teacher's Certificate, and also by the success of its graduates. One is now on the staff of the Department of Domestic Science—the first African woman to be appointed to the staff of University College, of Nairobi.

There is, as yet, little or no demand for home economists in the many roles in hospitals, research laboratories, in business and industry, that have appeared in the more industrialized countries. If accomplishment in some areas of home economics lags somewhat behind the hopes and plans of its leaders and well-wishers—that is as it is in many countries with a much longer history of home economics education.

The work of home economists in Kenya is doing much, along many lines, to aid in the building of the nation.

Scholarships Presented at University of Guelph

Stouffer Foods Corporation of Cleveland, Ohio, has established two \$500 scholarships at Macdonald Institute to honor Mrs. Margaret Laughlin Mitchell, a graduate from Macdonald Institute who is now their vice-president and administrative assistant to the president.



Helen Irwin, Anne Jennings and Mrs. Mitchell.

Mrs. Mitchell presented the first awards to Miss Helen Irwin, Kleinberg, Ont., and Miss Anne Jennings, Schomberg, Ont.

CANADIAN HOME ECONOMICS JOURNAL

*Copies of speeches made by Miss Ricketts in the U.S. and in Canada appear in C.H.E.A. Journal Vol. 11 (4), December, 1961, p. 9; and Vol. 55, No. 1, January, 1963, of the American Journal of Home Economics.

Who's Who in Canadian Home Economics

Frances Little, B.Sc. (H.Ec.)

Miss Frances Little, Chairman of our HEIB Committee, spent the early part of her life in Alberta, having been born and educated in Edmonton. After receiving a Bachelor of Science degree in Home Economics from the University of Alberta in 1950, she went to the Royal Victoria Hospital in Montreal for a year's internship in Dietetics.

Miss Little has held various positions in the field of Home Economics in Business. She was Home Service Director for Robin Hood Flour for 9 years, and then for 2 years was Home Economist with the Consumer Section, Federal Department of Agriculture. At present she is Home Service Director of the Canada Starch Company.

Miss Little believes that membership in our National Association is of great value to a Home Economist, especially if it involves responsibilities. This philosophy is evidenced by her own participation in Association activities. She was a member of the National Executive and also of the Legislation and Constitution Committee from 1965-1966. The success of the 1966 Convention was, in part, due to the efficiency and graciousness of Miss Little as Chairman of the Hospitality Committee.

Miss Little holds membership in the Montreal Home Economics Association, in the Canadian Dietetic Association, and also in the Corporation of Dietitians of Quebec.

Miss Little's outlook on Home Economics and careers for women may be summed up in her own words as follows: "Married working women seem to have the best of two worlds - Home Economists can play their part in this new trend in our society, by helping women combine two careers efficiently without detriment to family life.

Miss Little, in her leisure time, enjoys swimming, walking, interior decorating, and collecting cook books.



Margaret Ross McKellar, B.A., M.Sc.

Miss Margaret Ross McKellar was born in London, Ontario. After attending primary and secondary schools in Toronto, she continued her education at the University of Toronto, receiving from this latter institution both a Bachelor of Arts and a Master of Science degree. This was followed by a dietetic internship at the Montreal General Hospital.

Miss McKellar has held a number of interesting positions in the fields of Dietetics and Teaching. She has had experience as a dietitian at Simpson's Arcadian Court, Toronto; was in charge of the Food Services, as well as being a member of the Home Economics Faculty, for 4 years at Mount Allison University; and during the war years, 1942-1945, she served her country as a messing officer in the R.C.A.F. For 10 years Miss McKellar taught in the Household Science Department of the University of Toronto. She is presently Head of the Household Economics Department of Northview Heights Secondary School, North York, Toronto.

Miss McKellar, as well as being an active member of both the Canadian Home Economics and the Dietetic Associations, holds membership in the American Home Economics Association. She was the Ontario Director of our Association for the past 2 years and is now Chairman of the C.D.A.-C.H.E.A. Liaison Committee. Having served the C.D.A. as the Secretary, and also as Chairman of the Legislation Committee, her experience, as well as her interest in both organizations, make her well qualified for her Liaison Committee work. In her own words she is, "Particularly interested in encouraging a closer relationship between the two national organizations."

Miss McKellar has many interests outside her profession. She has travelled extensively both in Canada and abroad; she enjoys photography; and for many years she has been an active member of the Mendelssohn Choir in Toronto.



Wither or Whither the Family

by GRACE DUGGAN COOK

Associate Professor, University of Alberta, Edmonton.

Is there a substitute for the family? Despite all inventions, fads and fetishes, nobody has found one.

Russia has tried. After the 1917 Bolshevik Revolution at least certain factions viewed marriage and the family as institutional twins whose early demise was to be sought by any means. They claimed that everyone should have the right to marry if he pleased, when he pleased and to remain married only as long as he pleased.¹ Divorce could be secured with ease and no reasons were required. The couple merely made their decision and the state recorded it. Soviet society became increasingly involved in the rearing of children. We are told that "the separation of the kitchen from marriage is of yet greater importance than the separation of the church and state."² The Russian family was to "wither away." The experiment, however, failed to produce the type of man needed to meet the requirements of the Communist Revolution.

In the intervening years there have been many changes in family life policy in Russia. Legislation in 1944 tightened marriage and divorce laws. Financial and honorific rewards were given to mothers of large families. Kenkel says "Once it was said that 'the saucepan is the enemy of the party cell'; now it is recognized that the family is the important cell of society and efforts will probably continue to strengthen this cell."³ In fact Sorokin states "Soviet Russia today has a more monogamic, stable and Victorian family and marriage life than do most of the western countries."⁴ But Russia still has not produced the man needed to reach the ultimate aim of Communism — the honest, unselfish, pure-in-mind and loyal type of man the Soviets are now calling for.

Canada has always recognized the family as the basic unit in society, moral and spiritual as well as economic. His Excellency, Governor General Vanier, said: "The Family is the basic unit of our society; upon its strength and vitality depends the moral fiber of a nation." Leading psychiatrists on this continent say that the mental health

of the individual cannot be separated from the mental health of the family unit. The future of Canada depends on the strength of its homes and the character of the men and women these homes produce.

But home life is under attack. Forces are at work to destroy faith in God and other basic loyalties which have made our homes strong. Families can meet this onslaught only by living for an objective relevant to the problems of this age.

In 500 B.C. Confucius said: "To put the world in order, we must put the nation in order; to put the nation in order we must put the family in order; to put the family in order we must cultivate our personal life; to cultivate our personal life we must first set our hearts right." In 1966, conversely, I say that if the individual is to survive he must take responsibility for the family; if the family is to find its objective it must take responsibility for the nation, if the nation is to fulfill its purpose it must take responsibility for the world.

Although the intelligent homemaker recognizes that her homemaking does not end at her doorstep, she knows that it must start there. In miniature, most of the problems that beset the world beset the family. As go our homes, so go our nations. One day a little boy asked his parents: "How do wars break out? How are they declared?" The father, who was very learned in economics matters, started talking about cotton, oil and all the things that divide the world. But the mother thought the little boy was far too small to understand such things, and she said, "Let me explain it." She began to explain and the father grew angry and a great argument developed. The little boy was very frightened indeed, and held up his hands and cried, "Stop, stop. Now I know how wars begin." Countless families everywhere, who want peace in the world, are waging a private war of their own and so are robbing their country of a united effort. Selfish in the home, they have no constructive program for a selfish world. As go our homes, so go our nations.

Conversely as goes our nation, so go our

homes. They are enriched or degraded by everything that goes on in the larger community.

How can families take responsibility for the nation? Here are four ways:

1. Develop the character and courage necessary to rebuild the world, beginning with the home. I think of one mother who disliked housework and life for her was made up of plenty of it. She came to see the significance of a well kept home in the life of her family if they were to take responsibility for changes that must come in the nation. Her home has since been used to care for people of many nations and of all races. She has discovered that woman's role is to nurture and to care for hungry hearts as well as hungry mouths.

2. Create the environment that will produce incorruptible men and women. Challenge them to take positions of leadership and responsibility. These are the only ones who should be supported. No one can think crooked and lead straight. This will require families that have learned to love, serve and care for people both inside and outside their own doors.

3. Trevitt writes, "Those who cry liberty when they mean license to write about anything that drifts through the human mind can be silenced if Americans (Canadians) demand a clean-up of the books and magazines on our counters and in our libraries." Let us urge directors of media of communication to stop the production of materials which downgrade marriage, motherhood and the home and which undermine respect for authority and other basic loyalties; instead challenge them to present materials that will help raise a generation with the strength of character and qualities of leadership which this age demands. Why not watch T.V. programmes with this sort of evaluation in mind?

4. Promote a national aim and purpose big enough to unite our many citizens — French, Ukrainian, English, Indian, and the others. Then our varied cultures become our assets and our differences vanish. Canada is in a unique position. It has few enemies outside its boundaries. Yet it is tearing itself apart internally. Such conditions as "separatism" will disappear when Canada takes on adequate world aims and

responsibilities. It really is not so much a matter of what language Canadians speak; it is a matter of what they have to say to the world, and whether they will risk saying it.

Recently I met a young French Canadian. He had been a passionate separatist. He said that when someone showed him something bigger to fight for, to give his life for, his separatism vanished. He is now giving his life to make his country, Canada, play its role in the family of nations. He has found an aim. As Canadians truly love and serve their own country, they will strive to make it what it is meant to be — a reconciler and remaker of nations.

It is taken for granted that we continue to enjoy all the benefits of technical and scientific advance. A materialistic aim, however, is not enough. We must go further. Consider seven vital aspects of family life: faith, standards, work, money, leisure, marriage and sex.

First, we Canadians must live by a faith in God that is as real and as necessary to us as our wheat and oil. Then nations will look to us for more than material gain. "And He shall have dominion from sea to sea." "And nations shall run to thee because of the Lord thy God."

Second, we must have standards — absolute moral standards. One of my university colleagues contends that there would be fewer mental health problems if emphasis was placed on the humanities and the arts. Is this enough? Neither cultural Europe nor technical America has solved its problems. A doctor of philosophy from Vienna said: "We in Europe thought that when we had analyzed the situation we had solved the problem. History shows that we have not. We used our intellect to kill our conscience. This led to moral breakdown, dictatorship and brutality. Now we must serve our conscience with our intellect and work it harder than ever before." To prevent confusion and collapse, absolute moral standards are vital. Although they may not be attained, they are the guidelines or terms of reference; they point the way for sound family life.

Respect for honest work well done is imperative. History reveals that the division of labor within the family over the centu-

ries has taken many different forms. At any one period of time, however, the men and the women have been fairly clear as to what were their respective tasks. In contrast, today there is confusion on this point. Some authorities claim that because the mother is helping to earn the income, and the father in helping with the housework, the role of each is blurred and that this makes for misunderstanding and conflict. Be that as it may, there are various ways the work and the earning for the home may be divided, but in any arrangement certain facts are clear. Mothers must be more than housewives. Fathers must be more than breadwinners. Parents must take full responsibility for the children they bring into the world. Mothers must have the babies and assume the larger share of responsibility for seeing that they are nurtured, loved, and cared for. Fathers must take ultimate responsibility for the whole family; responsibility is taken not given. Then everyone will be restored to his God-given role and besides that, the work will be well done. The important thing is that the welfare of everyone be considered, with resulting satisfaction for all.

Like so many man-made wonders, money is a technical tool neither good nor evil until it is used. As families continue to make fewer and buy more goods and services for themselves, it is essential that they learn how to use this tool effectively. Most of them like to spend money, but unfortunately find it dull to plan, record and evaluate its use. If they can see that this is done to give them the most for their money, it becomes interesting and meaningful. This is budgeting. All a budget does is help to stretch the income. There are three decisions to be made in the use of money after it is earned: What to spend it on; where in the modern market can the best buy be made; and how should the article be paid for? The first involves values or goals in life. For example there is \$100 to spend. Will it be used for more clothes for the teenager, a trip for the parents or given to a favorite philanthropy? Once this decision is made, the next is to find the best teenage clothes, the most stimulating trip or the most worthy cause. This is wise consumer buying. Finally the decision must be made on method of payment cash or

credit. Consumer credit is another man-made tool. If it becomes a master rather than a servant, it can cause devastating and tragic experiences. On the other hand, when used with both knowledge and restraint, it raises the standard of living and offers many blessings.

To free people from empty purposeless leisure is an immediate challenge. With technical advances and automation on a large scale, the home has shifted its emphasis from the homemaking skills as an end in themselves. Household production is decreasing rapidly. The length of the working day is becoming shorter. In fact, many people are unemployed. What is called unemployment today will be called leisure tomorrow. This leisure must be filled, not only with purposeful plans for the family but with creative endeavor for the larger family of nations.

Permanent monogamous marriage is essential for the welfare of the family. Kardiner, Professor of Clinical Psychiatry at Columbia writes: "These cultures that have endured longest and made the greatest contributions to what we call civilization have been monogamous."⁶ In this form of marriage the children can grow up with a sense of security and the partners may achieve a satisfying relationship in all aspects of life, intellectual and spiritual, as well as physical. In polygamous unions it seems difficult to imagine anything but a physical relationship.

The restoration of sex to its rightful place is mandatory for the stability of family life. This includes chastity before marriage and fidelity in marriage. Illegitimacy in Canada was the highest rate ever recorded in 1964. In 1965 venereal disease headed the list of the 10 leading notifiable diseases in Canada. The Federal Department of National Health and Welfare reports: "While there may be varying opinions as to whether these diseases have reached the epidemic stage, there is mounting evidence that they could do so if allowed to spread unchecked."⁷ Lunn and Lean put the blame on the cult of softness. They write: "The revolt against difficulty is the key to modern decadence. Chastity is difficult and therefore the cult of softness produces a rationalization of self-indulgence."⁸

Sex restored to its rightful place seems absolutely necessary for national health — indeed for national survival. Dr. Ernest Claxton, Assistant Secretary of the British Medical Association, in an article on "Why Chastity Matters" says: "Because people have no fundamental philosophy of life, no ideology, no satisfying religious faith, it is all too easy to turn to sex for transient gratification." He goes on to say: "Widespread promiscuity could lead to a veritable epidemic of venereal disease. Contraception is not a complete safeguard either against venereal disease or illegitimacy. Serious as this may be, it is a far less danger than would be the effects on social culture. You cannot disregard moral law without provoking irremediable consequences. History makes clear the pattern of what happens to a nation that disregards the fundamental laws of living."⁹

The late Dr. J. D. Unwin, whose investigations covered the customs of eighty primitive peoples and sixteen civilizations, over a period of forty centuries, states: "Any human society is free to choose either to display great energy or to enjoy sexual freedom; the evidence is that it cannot do both for more than a generation."¹⁰

To enable it to fulfill its purpose, Canada must deal drastically and decisively with promiscuity and license.

In conclusion, faith in God, absolute moral standards, honest work, efficient use of money, purposeful leisure, wholesome marriage, and sex restored to its rightful

place are essential. Families that follow these guidelines will know whither they are going.

In its first century, Canada has known the true satisfaction, joy and moral growth of sacrifice. In contrast, it has known the flabby satiety of self-indulgence and infidelity. Will it dare to make its second century rich, wholesome and glorious because it has launched on the endless adventure of battling for right against wrong, law against anarchy and discipline against license? Then Canada will make its unique and complete contribution to the whole human family.

"Law and the Women of Ontario," a booklet outlining the duties and rights of the women of Ontario, particularly in their roles as wives and mothers; 25¢ a copy or 20¢ a copy for orders of 25 or more. Write, Women's Bureau, Ontario Department of Labour, 74 Victoria Street, Toronto 1A, Ontario.

UNIVERSITY OF GUELPH

ASSOCIATE DEAN OF (Dean-Designate) HOUSEHOLD SCIENCE

Applications are invited for the position of Associate Dean (Dean-Designate) of the Faculty of Household Science (Macdonald Institute) at the University of Guelph.

The appointment will be as Associate Dean to assume the position of Dean within the near future. The initial responsibility as Associate Dean will be to establish, in consultation with the Dean and the faculty, the long-range plan for the academic programme in Household Science and to provide the faculty leadership in the design of new physical facilities.

Macdonald Institute has been established for more than sixty years at Guelph. The current undergraduate enrolment in Household Science of 365 is projected to increase to 600 by 1975. Graduate programmes leading to M.Sc. and Ph.D. degrees are also being offered in the fields of Textiles, and Foods and Nutrition, and in Home Management at the Master's level.

The Associate Dean (Dean-Designate) will report directly to the Vice-President Academic and the Dean in all matters regarding long-term academic and physical planning.

The person sought for this position will be a University graduate in an area related to the disciplines involved, with post-graduate study preferably to the doctoral level.

The salary will be commensurate with duties and responsibilities, and fully competitive with similar positions elsewhere.

Replies, which will be treated in strictest confidence, should be sent to the Vice-President Academic, University of Guelph, Guelph, Ontario, Canada.

BIBLIOGRAPHY

- ¹For a discussion of the main points of the Family Code of 1918 see G. M. Sverdlov, "Milestones in the Development of Soviet Family Law," *American Review on the Soviet Union*, Vol. 9 (Aug., 1948) pp. 10 ff.
- ²Halle, Fanning W. *Women in the Soviet Russia* (New York Viking Press Inc., 1935) p. 366.
- ³Kenkel, Wm. F. *The Family in Perspective* (New York, Appleton-Century-Crofts, Inc. 1960), p. 161.
- ⁴Sorokin, Pitirim. *The American Sex Revolution* (Porter Sargent, Boston 1956), p. 115.
- ⁵Trevitt, Virginia. *The American Heritage—Design for National Character* (McNally and Loftin, Publishers, 1966), p. 156.
- ⁶Kardiner, Abram. *Sex and Morality* (Routledge and Kegan Paul, 1955), p. 194.
- ⁷Canadian National Health and Welfare Bulletin, Dec. 1963, "V.D.—The New Onslaught on the Young."
- ⁸Lunn, Sir Arnold and Lean, Garth. *The Cult of Softness* (Blandford Press, 1965), p. 105.
- ⁹Claxton, Ernest. "Why Chastity Matters," *New World News*, No. 31 (October-December, 1963), pp. 6-7.
- ¹⁰Unwin, J. D. *Sex and Culture* (Oxford University Press, 1934), p. 412.

Provinces with Home Economics Teacher Groups Affiliated with Provincial Teacher Associations

Compiled by A. BERNEICE MACFARLANE, Education Committee Chairman

British Columbia

The British Columbia Teachers' Federation authorized and encouraged the formation of provincial specialist associations. Membership is voluntary and the fee in the Home Economics Association is \$2.00.

The B.C.T.F. subsidizes these P.S.A.'s with an annual grant of \$2.00 per active member up to a maximum of \$1,000.00. There is also an In-Service Grant of \$100.00 per P.S.A. plus services (consultative, office and bookkeeping, etc.) and also consideration for special activities.

The main activities of the group are to assist in such activities as curriculum study, in-service education activities, and the delineation of standards of qualifications for teachers of particular subjects or areas.

The associations attempt to carry out these functions by convening annual meetings and conventions, by providing resources for local or regional conferences or workshops, by offering assistance to local in-service education committees, by forming local or regional chapters of the P.S.A.'s, and by publishing newsletters, journals and special reports to keep all members informed of the work of the P.S.A.'s and of educational developments in the areas of special interest to the P.S.A.'s.

Alberta

The Home Economics Council was formed to promote professional development by order in council of the Alberta Teachers' Association in 1960. All areas of specialty have this privilege if fifty members request formation of a council. Membership is voluntary. The fee is \$5.00 annually.

Professional growth is encouraged through provision of a subsidy. The method of granting money has altered but the latest formula provides a basic grant to each council of \$750.00.

Membership grant structure:

\$3.00 per member for first 300 members
(\$900.00 max.)

\$2.00 per member for next 200 members
(\$400.00 max.)

\$1.00 per member for each additional member.

If the association approves a special project, considered to be of value to a large number of teachers in addition to council members, half the cost of the project is given to an annual maximum of \$200.00, ex.: publication of the *Junior Miss Cookbook* for Junior High School.

There are six regional councils throughout the province. They are each given a subsidy by the Home Economics Council.

Activities include the publication twice a year of "Home Echoes" and three newsletters; research projects undertaken by regionals and shared by all; library books, films, filmstrips and other teaching aids for loan; seminars; workshops at the Banff School of Fine Arts; a representative from each regional council attends executive meetings; financial assistance given to an executive member attending national and international Home Economics Association Conventions; council members serve on provincial curriculum committees.

Manitoba

The Home Economics Specialist Group of the Manitoba Teachers' Society was formed in response to an invitation from the society. Membership is voluntary. The annual fee is \$1.00.

It is subsidized by the provincial association up to \$100.00 for operating expenses plus another \$100.00 per year for special projects.

The main activity includes study groups, workshops, refresher courses and curriculum development.

Ontario

The group was formed in response to a suggestion by Mrs. Adelaide Hoodless in

An Estimate of Number of Home Economists Employed in Canada—June 1967

	Women in Business	Teachers	Dietitians	Extension	Nutritionists	Total
British Columbia.....	22	519	142	4	7	694
Alberta.....	22	356	100	32	3	513
*Saskatchewan.....	12	75	33	10	4	134
Manitoba.....	13	132	40	16	3	204
*Ontario.....	70	1,000	364	55	36	1,525
*Quebec.....	28	127	243	—	13	411
New Brunswick.....	1	175	33	4	—	214
Nova Scotia.....	—	184	35	5	5	229
Newfoundland.....	2	9	6	6	1	24
Prince Edward Island.....	—	23	3	—	—	26
TOTAL.....	170	2,600	999	132	73	3,974

(*)—Figures from the 1966 Estimate.

Number of Students Registered in Degree Courses in Home Economics in Canadian Universities—1966-67

(1965-66 Figures in Brackets)

University	Home Economics Degree	Education Degree (H. Ec. Major)	Graduate	Total
British Columbia.....	280	35	—	315 (257)
Alberta.....	254	16	1*	271 (155)
Saskatchewan.....	204	13	—	217 (188)
Manitoba.....	363	—	4*	382 (330)
			15†	
Guelph.....	365	—	7*	372 (323)
Toronto.....	92	—	6*	98 (99)
Ottawa.....	33	—	—	33 (43)
Western Ontario.....	123	—	—	123 (77)
Windsor.....	38	—	—	38
Laval.....	93	—	—	93 (131)
Macdonald College.....	165	1	3*	169 (180)
Marianapolis College.....	27	—	—	27
Montreal.....	98	—	5*	103 (121)
Fredericton Teachers' College.....	—	58	—	58
Moncton.....	2	—	—	2
Mount Allison.....	66	—	—	66 (82)
New Brunswick.....	—	32	—	32
Acadia.....	96	—	—	96 (77)
Mount St. Vincent College.....	60	—	—	60 (54)
St. Francis Xavier.....	74	—	—	74 (67)
Prince of Wales College.....	19	—	—	19 (17)
TOTAL.....	2,452	155	41	2,648

(*)—Graduate program in Home Economics.

(†)—Graduate program in Education majoring in Home Economics.

1903. Membership is voluntary. The annual fee is \$5.00.

The provincial association subsidizes the group with contributions to the cost of speakers for meetings, and for expenses of workshops. The amount provided varies with the type of program with which help is needed and the amount which is required.

The main activities of the group are

concerning the program for the annual meeting, regional meetings held throughout the province once or twice a year, workshops held during the summer, and the production and distribution of a Newsletter three times a year.

New Brunswick

The home economics teachers along with the industrial arts, related subjects, com-

(Continued on page 43)

Appréciation des Propriétés Organoleptiques des Aliments

*Institut de recherches sur les aliments
par ELIZABETH LARMOND*

Elizabeth Larmond (née Poirier) détient le B.Sc. (Ec. dom.) de Mount St. Vincent University, Halifax. Elle a fait son internat à l'hôpital municipal d'Ottawa. Madame Larmond est actuellement responsable du programme APPRÉCIATION DES PROPRIÉTÉS ORGANOLEPTIQUES DES ALIMENTS, à l'Institut de recherches sur les aliments, du ministère de l'Agriculture du Canada à Ottawa.

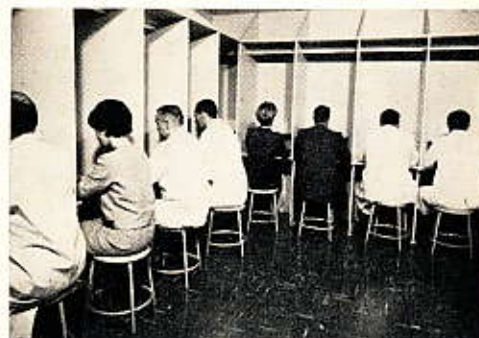
L'Institut de recherches sur les aliments, du ministère de l'Agriculture du Canada, a été établi en 1962. Le personnel de l'Institut étudie les facteurs qui déterminent la qualité des produits alimentaires, les nouvelles techniques de transformation et d'entreposage, la création de produits préparés avec les produits agricoles du Canada et les moyens d'assurer à l'échelle nationale et mondiale la meilleure utilisation possible des denrées alimentaires.

A cette fin, les chercheurs de l'Institut étudient l'identité, les propriétés et les réactions des glucides, des lipides et des protéines qui entrent dans la composition de certains aliments de base. Ils cherchent aussi à se renseigner sur le comportement de certaines classes d'organismes et de micro-organismes. Leurs connaissances des propriétés chimiques, physiques et biochimiques des aliments de base servent à élaborer de nouveaux produits ou de nouvelles techniques de transformation. A la lumière des dernières recherches dans le domaine chimique et biochimique, ils évaluent le degré de détérioration des fruits et des légumes au cours de l'entreposage.

La définition et l'appréciation de la qualité des aliments est l'un des principaux sujets d'étude à l'Institut. Il n'est pas facile de définir la qualité des aliments, qui dépend de plusieurs facteurs: la grosseur, la forme, la couleur, la texture, l'arôme, la valeur nutritive, les facteurs kinesthésiques et autres. L'appréciation subjective de la qualité est faite au moyen de séances de dégustation, et l'appréciation objective, au moyen d'épreuves chimiques et physiques. Les épreuves chimiques contribuent à établir une relation entre la qualité des aliments et leur composition. Les épreuves physiques peuvent être effectuées à l'aide d'instruments dont les mieux connus sont le



Madame Larmond présente le cabaret au dégustateur dans sa cabine.



Kramer Shear Press et le dispositif de Warner-Bratzler. La chromatographie en phase gazeuse et la spectrométrie de masse sont utilisées pour analyser l'arôme des aliments. La couleur est étudiée à l'aide de la colorimétrie à trois couleurs.

Certains aspects de la qualité des aliments peuvent être appréciés par des techniques subjectives. C'est pourquoi l'appréciation par les dégustateurs sert à l'évaluation des techniques de transformation des aliments de base, de l'effet des substitutions, des modes d'entreposage, des recettes

qui utilisent des nouveaux produits et des normes pour la détermination objective de la qualité.

Au cours des dégustations, des précautions sont prises pour éliminer les erreurs attribuables à des facteurs psychologiques. Ces erreurs comprennent non seulement les fautes de techniques et les erreurs de calcul, mais aussi les modifications aux résultats apportées par des facteurs externes: disposition et état de santé des dégustateurs, ambiance.

Pour des raisons d'ordre économique et pratique, les dégustateurs sont choisis parmi le personnel de tous les secteurs de l'Institut; la participation aux dégustations est l'une des fonctions du personnel. On n'invite pas cependant, les personnes qui n'aiment pas les aliments à l'essai ou qui ont créé, produit ou préparé ces aliments.

Les dégustateurs doivent être en bonne santé. Doit-on accepter des fumeurs? Certains disent oui, d'autres disent non. Cependant, les appréciations des fumeurs sont en général, aussi minutieuses que celles des personnes qui ne fument pas. On demande toutefois de s'abstenir de fumer pendant une heure ou deux avant la dégustation.

L'âge d'un sujet ne semble pas influencer ses aptitudes comme dégustateur. Généralement, les personnes douées de facultés sensibles ordinaires, qui sont consciencieuses, intéressées, prêtes à prendre le temps voulu pour donner une bonne appréciation, sont plus recherchées que les personnes douées d'un goût et d'un sens olfactif très fins mais, moins consciencieuses.

Les dégustateurs sont choisis selon leur compétence à déceler les variations dans un aliment donné. Les personnes qui peuvent évaluer tous les aliments sont rares. Les dégustateurs choisis reçoivent généralement un certain entraînement; ils doivent connaître l'aliment et les facteurs de qualité.

Les participants aux séances de dégustation sont généralement au nombre de huit ou de dix; parfois cependant ils sont plus nombreux, voire même vingt-cinq.

Les dégustateurs sont généralement installés dans des cabines, d'où sont éliminées les distractions: bruits, arômes de cuisson, etc.; les murs sont peints gris pâle; les

cabines sont éclairées par une lumière fluorescente blanche qui n'affecte pas la couleur des aliments; elles sont aussi munies de lumière fluorescentes rouge qui dissimulent les variations de couleur; ces lumières sont utilisées dans les cas où on évalue la saveur des aliments.

Généralement, les dégustateurs jugent un aliment en tenant compte de tous caractères. On essaie de leur présenter des échantillons aussi uniformes que possible, les seules différences étant les variations étudiées.

Les dégustateurs ont la tendance à préférer certains mets préparés avec des ingrédients de haute qualité et à négliger les autres préparés avec des aliments de qualité inférieure . . . quand ils le savent! On leur donne donc le moins de renseignements possibles, afin de ne pas influencer leur choix.

Les mets soumis à l'appréciation doivent être servis à la même température et présentés dans des contenants de verre ou de papier inodore. Les échantillons sont numérotés et présentés au hasard.

Le but de la dégustation est généralement soit de déceler les variations entre les mets, sans tenir compte des préférences personnelles, soit de préciser les préférences des dégustateurs. On recherche des réponses spontanées. La plupart des dégustations qui ont eu lieu à l'Institut de recherches sur les aliments sont des épreuves de différenciation.

En contrôlant les facteurs externes, et en **CHOISSANT LES DÉGUSTATEURS**, le personnel de l'Institut obtient des données permettant d'évaluer les propriétés organoleptiques des aliments lesquelles peuvent être déterminées par des épreuves objectives.

EDUCATION COMMITTEE REPORT

(Continued from page 41)

mercial, etc., comprise the New Brunswick Vocational Institute. This is affiliated with the New Brunswick Teachers' Association but not subsidized by it. The fee is \$2.00 annually.

Meetings are held in the spring and fall and the session is in the nature of a workshop. All groups meet together for the opening program where problems are discussed and recommendations made.

Quality Control in Food Retailing

by NORMAN LOGAN

Manager Quality Control, Steinberg Foods, Montreal.

"Quality Control" has a different meaning and perhaps a different concept to people depending on the industry in which it may be used. As an example, the term "Quality Control," when applied to one part of the food industry, would indicate the application of quality control from the time a tiny seed is placed in the soil through the ensuing processes of growth, cultivation, harvesting, processing, packaging, storage, distribution to the retailer and hence to Mrs. Consumer, in which a quality product is essential for acceptability and the health of her family.

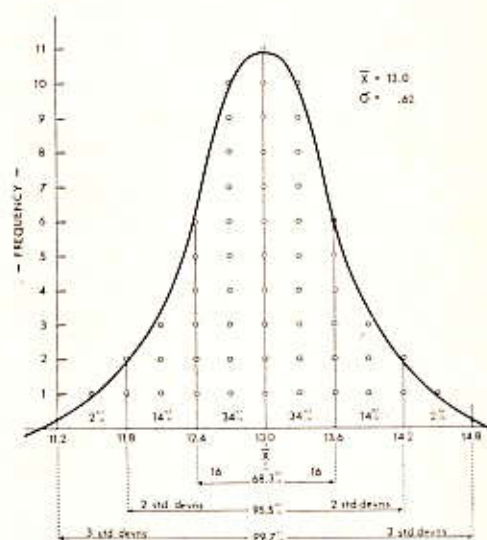
Statistical Methods in Quality Control

I would like at this time to outline several aspects of statistical quality control in order to give you some appreciation of its significance in total quality control. The first application of modern statistical quality control to industry took place about forty years ago and was originated by Mr. Shewhart of the Bell Telephone Laboratories in United States. The greatest application of these principles to the food industry has taken place in the last twenty years or so.

In the application of statistical methods a normal distribution curve becomes the first principle of understanding in the application of statistical quality control and that any food product that is produced has a variation or a degree of dispersion similar to this. (See Fig. 1). The fill of any food product packaged will have a similar variation and the control required to reduce this variation results in attaining a degree of uniformity.

The second commonly used tool in quality control is the application of fill or weight control. A Shewhart control chart (See Fig. 2) for variables is undoubtedly the most generally used statistical tool in any quality control program. Control charts have been found to be extremely effective both when filling is done by machine or by hand. Dramatic savings in materials and improvements in uniformity

Fig. 1. Illustration of Drained Weights of Canned Tomatoes Exhibiting a Normal Distribution

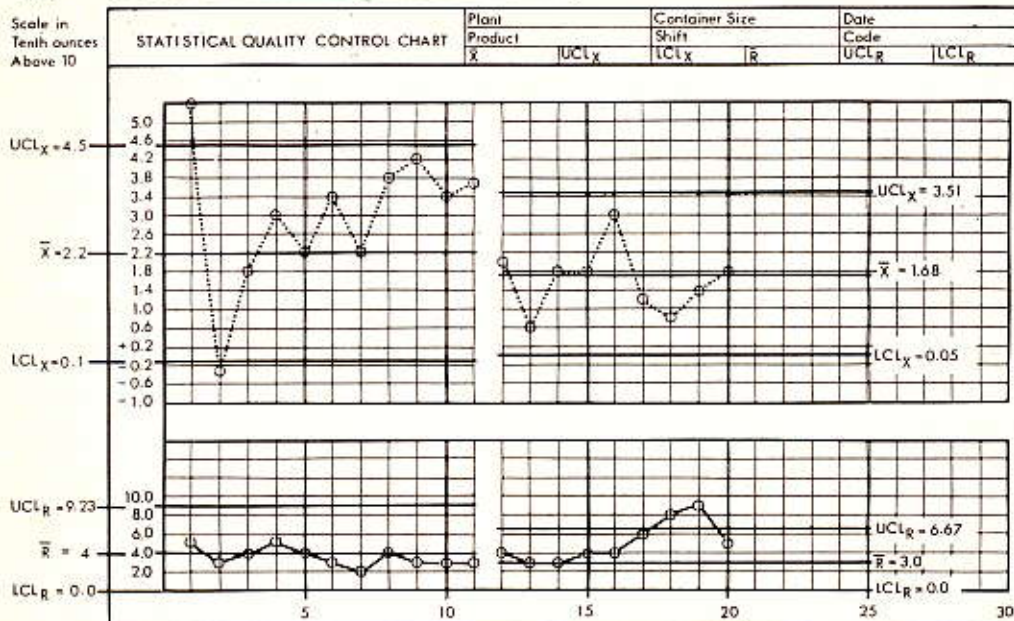


can frequently be demonstrated in a very short time.

Control charts are not limited to weight control as the field of application is very wide. Some other areas in which these charts are being used in the food industry are volume of containers, sizes, dimensions, colour and other appearance properties as consistency, firmness and other rheological properties. Moisture, fat, protein and other chemical or nutritional properties, mold, bacterial and other micro-analytical counts — or measurements as yields, batch or continuous mixing operations, etc. It is used not only in the production line but also for incoming raw materials.

The third important tool in the application of statistical quality control is sampling plans. We all realize that it would be impossible and impractical to sample every item in the lot. A sampling plan is thus designed to establish the number of samples required to be examined to ensure that a product meets a designated quality standard. For example, a load of sweet

Fig. 2. VARIABLES CONTROL CHART FOR FILL OF CONTAINERS



potatoes contains approximately 50,000 individual roots. The buyer agrees to accept a load provided there is not more than 1% diseased roots. Using statistical design sampling plans we would find that 450 roots would be required to be examined, the load would be considered accepted if 10 or less are rotted; the load would be rejected if 11 or more of the 450 roots are rotted. The plan is set up in such a way that if the seller is actually providing material that is up to specifications, in this case 1% defective, there is little risk, usually less than 1 chance in 20, that this lot would not be accepted. However, the risk on the buyer is much greater and may vary using the same plan. The buyer would be accepting lots containing 3% diseased roots 20% of the time, thus if this was too great a risk for the buyer he would be required to use a tightened inspection plan. This would call for a larger number of samples to be examined, that is 750 instead of the original 450, so that under this plan the buyer's risk of accepting lots with 3% diseased roots would be reduced to 7% as compared to 20% under the other plan. It is hoped that these three statistical tools will give you some concept of the application of statistical quality control.

Distribution in Quality Control

The most evident change in new foods is the wide array and number available. This is evident in modern supermarkets today where upwards of 8,000 to 9,000 items are carried. Many of the products are really new — something different from what was available before, but many are no more than old products dressed up in new packages of different shape, colour, size or even just different brands.

There is one thing in particular which will bring Mr. and Mrs. Consumer back again and again and that is *quality*. Consistent uniformity and stability, uniformity of quality gives security to many consumers both in terms of something familiar and something certain. This is where technology and quality control have incorporated methods of processing, techniques of control from basic raw materials through processing, preservation, packaging, storage and distribution to the point of sale in supermarkets of today. Supermarkets today are taking an ever increasing role in quality at the point of sale to assure customer satisfaction.

Distribution from processing plants to point of sale, is a very important link in the chain of quality control. Some recent

changes in transport van refrigeration, with the application of liquid nitrogen to continually preserve the quality of frozen and refrigerated foods, has proven to be advantageous. Liquid nitrogen when exposed to air quickly changes into a gaseous form. Nitrogen in the liquid form has a temperature below -300°F . If you quickly lowered and as quickly removed an apple in liquid nitrogen it would instantaneously become solidly frozen so that if you dropped the apple on the floor it would shatter to pieces.

We have been experimenting with nitrogen for our transport trucks for the past year and a half as a replacement for the gasoline driven freon compressor units commonly used. The design is very simple, with a supply tank in the truck which will hold approximately 250 lbs. of liquid nitrogen. The nitrogen is dispersed through the van by one line of tubing which has perforated holes. The temperature is thermostatically controlled to the desired temperature setting depending on whether the item being carried is frozen foods or fresh fruits or vegetables or other such perishable items.

With the reefer type of refrigeration it took approximately two hours to bring the temperature of the van to 0°F . With nitrogen this can be attained in 3 to 5 minutes. It is ideal in the city where many stops are made. As soon as the doors are closed the temperature can be quickly brought to the desired temperature of -10°F . in a matter of minutes.

We have found this application of nitrogen to be very advantageous to the continual presentation of frozen or perishable type foods, and we now have six vans, fully equipped with this equipment, which went into operation this spring.

Quality Control in Private Label

The manufacturing division of Steinberg's Limited makes approximately 200 products and 90 more are produced by outside suppliers for Steinberg private label products. Private label refers to house brand of a particular supermarket chain and are manufactured by or for them by a regional or national food company.

As many of the food products sold in a supermarket are of a perishable or semi-perishable nature, a close control of the

product shelf life is required if a product is to reach the customer in prime condition. The key to identifying a product shelf life is date coding. This code will be a number or letter that usually appears on the left hand corner or bottom of the label. Some products may have the actual expiry date on the package in which case this product must be removed from the store shelf on that date.

Of course the effectiveness of the date code will depend on the training and experience of the store employees. Rotation of merchandise, the establishment of daily requirements and proper ordering demand skill. Standards of performance for ordering and stocking and close supervision by specialists are designed to assure that products meet the desired quality expectation.

The key factor in determining a product shelf life is time and bacteriological growth. With many products these two factors are inter-related. Bacteriological control is an integral part of quality control in order to assure that products are manufactured under sanitary condition.

Goods sold under private label involves two types of quality control — one — the control of goods manufactured by others under private label, and — two — the control of goods that we manufacture and process ourselves. Quality control employ the services of several chemists, a bacteriologist, a chemical engineer, and food technologists with special training in specific lines of food products, as well as laboratory technicians.

With outside suppliers of fruit and vegetables, for example, samples are tested to assure meeting product specifications before being shipped. This is done at the time of packing on a regular basis, as is plant inspection during the season in order to guarantee consistent quality.

A continual testing and sampling program is done on all private label products at store level. This is to assure that the particular product meets the required specification, and it is tested with a national brand to assure that it is equal to or better than the best nationally known brand.

Some thirty tests may be done on certain products in manufacturing quality control

Welcome . . . to New Members February 1 to April 30, 1967

British Columbia

Burrow, Miss Margaret A., New Westminster.
Chard, Miss Patricia, West Vancouver.
Cole, Miss Donna M., Ladner.
Colotelo, Miss Gloria, North Vancouver.
Cottell, Mrs. Donna M., Vancouver.
Fitch, Miss Mary, Vancouver.
Lang, Mrs. Barbara A., Burnaby.
Meagher, Mrs. Margaret T., Vancouver.
Murphy, Mrs. Margaret E., Vancouver.
Palmer-Stone, Mrs. Winnifred, Victoria.
Wilson, Mrs. Ruth, Vernon.

Alberta

Feyrer, Miss K. Ann, Edmonton.
Garrett, Miss Sheila, Edmonton.
McKay, Miss Melissa, Camrose.
Murta, Miss Judith M., Edmonton.

Saskatchewan

Adam, Mrs. Elaine, Regina.
Beattie, Miss Josephine M., Dinsmore.
Benson, Miss Edna M., Raymore.
McLean, Miss M. Sandra, Regina.
Mills, Mrs. M. Helen, Saskatoon.
Minja, Mrs. Lynn A., Saskatoon.
Sister Elaine, S.S.M.I., Saskatoon.
Rempel, Mrs. Bernice L., Moose Jaw.
Whetter, Miss Maureen R., Kinistino.
Woodward, Miss Peggy, Saskatoon.

Manitoba

Boyko, Miss Eileen C., Selkirk.
Hall, Miss Grace E., Winnipeg.
Parrott, Miss Linda, Winnipeg.

Ontario

Blenkhorn, Mrs. M. W., Kingston.
Bond, Mrs. Diana E., Sudbury.
Cowan, Mrs. Thomas, Willowdale.
Cowbrough, Miss Kathrine A., Guelph.
Crowe, Miss Margaret P., West Hill.
Davidson, Miss M. J., Ottawa.
Forrester, Miss Anne, Don Mills.
Jacobs, Mrs. Joyce C., Toronto.
Leeson, Mrs. Janet E., Guelph.
MacKay, Miss Jean, Lively.
Martineau, Mrs. D. J., Toronto.
Schmidt, Miss Eleanor E., Kitchener.
Shaw, Mrs. Geraldine, Ottawa.

Quebec

Raymond, Miss Monique, Quebec City.

New Brunswick

MacDonald, Miss Kay A., Codys, Queens County.

Nova Scotia

Gates, Miss Doris E., Halifax.
Morrow, Miss Barbara A., Halifax.

Prince Edward Island

Sutherland, Miss E. Kathleen, St. Peter's Bay.

to ensure a better finished product. Sausages, for example, undergo 30 different tests. They are examined for fat, moisture content, for cereal, protein and salt content, for uniformity of shape, size, taste and flavor, external texture, consistency and color, and for aroma, juiciness, tenderness, and shrinkage and bacteriological level. The raw material, in this case meat, will have also been examined previously for bacteria, color and purity.

Prototypes of new products are presented to a special committee representing product development, management and quality control. Our consumer panel of 500 women from all socio-economic strata evaluates and reports as to whether a product satisfied consumer requirements for quality acceptance.

These are some of the things we do to make sure the merchandise we sell to our customer is the best quality.

International Federation

of Home Economics

MEETING AT BRISTOL, ENGLAND

July 22-27, 1968

Interested C.H.E.A. members wishing to be delegates (100 only allocated to Canada) must write for information and application forms to:

Canadian Home Economics Assoc.,
151 Slater Street,
OTTAWA 4, Ontario.

Applications must be in for processing by July 1, 1967. After acceptance, the booking fee of £6 sterling will be requested and forwarded by C.H.E.A. to England by August 1, 1967.

For further information see December, 1966, and March, 1967, C.H.E.A. Journals.

PROMPT ACTION IS NEEDED

22 New Books for Africa

By the end of 1967, 22 new books on nutrition and related subjects, written especially for African countries, will have been published as a result of the joint efforts of three United Nations agencies.

They are intended to fill a gap in existing documentation in Africa, and are designed for more than 30 countries south of the Sahara. Their language is simple, though not un-technical, and their subjects are extremely practical. The theme of all the texts has a nutritional bias — both theoretical and applied — in all its ramifications, which includes teaching people how to dig and care for fish ponds, how to grow seedlings, and how to get best value for money spent on household food.

The books were sponsored by the United Nations Children's Fund, the World Health Organization and the Food and Agriculture Organization. Mervyn Reeves, officer in charge of the three-year project at FAO headquarters, said the main object had been to have the texts written by people working in the environments in which they would be used, who were thoroughly familiar with the countries concerned. All the authors live or have worked for long periods in Africa.

"Nutrition in Relation to Agricultural Production," by Dr. I. S. Dema, Associate Professor of food science and applied nutrition at the University of Ibadan, Nigeria, states that up to three-quarters of the households surveyed in 1962 in various rural parts of Nigeria "did not seem to have enough calories" and that protein requirements were not met. In a 1960 study of protein deficiency disease in infants, it was found that in 80% of cases in the Ibadan area, the cause was because the mother attributed the disease to a source other than nutrition.

"Human Nutrition in Tropical Africa," by Dr. Michael Latham, formerly medical officer in charge of nutrition of the Tanzania Ministry of Health, and now of the School of Public Health, Harvard University, has this to say about malnutrition: "One cannot blame people for being ignorant. Nobody blamed Vasco da Gama when, during the

first sea voyage around Africa from Europe to India, 100 out of 180 of his crew died of scurvy. They died because he and they were ignorant of the fact that vitamin C in fresh fruit prevented scurvy. These people died of scurvy because of ignorance, just as dozens of children are today dying in villages all over Africa because their mothers do not know what foods are necessary to prevent their illness."

The book also points out the value of traditional food habits — eating the dark green leaves of sesame, pumpkin and cassava, for instance, which are rich in vitamins and contain protein, unlike pale green European vegetables such as cabbage or lettuce.

Regarding food taboos, Dr. Latham says, "A speech by the president or a cabinet minister, the sight of a respected leader of the same tribe eating some 'forbidden' food and coming to no harm, the return to the village of educated and enlightened local people, will all prove much more effective than will the preaching or goading of an outsider."

"Grain legumes in Africa," by W. K. Stanton, Joyce Doughty, R. Oracca-Tetteh and W. Steele classifies 18 legume species (cowpeas, groundnuts, locust beans, soybeans and so on), describes the pests and diseases that can attack them, and details soil preparation, husbandry, harvesting and storage of the plants. It is meant to help train people to grow sources of vegetable protein.

"Our Foods," by H. and M. Dupin, is a handbook for educationists in West Africa. It gives elementary information on food requirements, on the value of local foodstuffs, and on efforts that should be made to develop food resources. It is intended for teachers' training colleges, secondary schools, schools of nursing and training centers for agriculturists and for social welfare and community development workers. It is also meant for persons already working as teachers, nurses, agricultural and livestock officers and others.

"Feeding the Family," by Margaret Powers, is a duo of handbooks, one for

ELEVENTH INTERNATIONAL CONGRESS ON HOME ECONOMICS

Bristol, England – July 22-27, 1968

Pre-Congress Tours of Ireland—July 14-21, 1968

The Home Economics Teachers of Ireland extend a Cead Mile Failte to all delegates visiting Ireland for relaxed Pre-Congress Tours which will include visits of professional and cultural interests throughout the country. Delegates will also be able to meet the members of local Home Economics Staff.

Four Tours are scheduled:

Tour A – Dublin to world famous Killarney, the University City of Cork, Blarney Castle, the Vale of Avoca, and Glendalough, the monastic center of the sixth century.

Tour B – Dublin to the University City of Galway, on the shores of its famous Bay, Connemara, Killarney, and Cashel, once the seat of the Munster Kings.

American, Canadian and Australian delegates may join either of the above tours at Shannon Airport.

Tour C – Dublin to the Mountains of Mourne, Belfast, the University City

of Northern Ireland, the coast road to the Glens of Antrim, Donegal, and Connemara with its thatched cottages, stone walls and wild scenery.

Tour D – Dublin to Sligo, center of the W. B. Yeats International Summer School, Donegal, noted for its tweeds and handicrafts, Connemara, and the Cliffs of Moher in the "Burren" Country, with its unusual rock formation.

De Luxe Coaches will be used on all tours, which will also include first class hotel accommodation.

Three nights have been arranged for the combined visit of all delegates to Dublin, where an attractive program has been arranged.

ACCOMMODATION

Shared Twin-Bedded Rooms with bath will be provided in first class hotels.

COST

The approximate cost per Tour will be £55.0.0 (Journey to Bristol not included). Single rooms will be available at an extra cost of £4.

Transport Dublin to Bristol after the Pre-Congress Tours can be arranged if necessary)

students and one for teachers, based on studies done in Kenya. Its subjects range from tips on getting the most food value for money spent (obtaining milk from the dairy saves five cents on every pint; one egg has the same building value as 1½ ounces of meat and costs less; locusts, white ants, wild birds and animals are all as good for building bodies as are cattle or goat meat) to basic information on food, nutrients and balanced diets.

Extension teaching – getting information and knowledge to people on their farms and in their homes – is an essential part of any program to build agriculture, and a "Guide to Extension Training," by D. G. Pradfield, is included in the series. It is

intended for pre-service and in-service training of agricultural extension personnel.

The books are being distributed by FAO and Longmans Green publishing company.

A complete list of the books can be obtained from the Rural Institutions and Services Division, FAO Headquarters, Viale delle Terme di Caracalla, Rome, Italy.

"Laws of Interest to Women," published by the Department of Attorney-General, Province of Manitoba, revised 1965, can be obtained by request from the Queen's Printer, Legislative Building, Winnipeg, Man.

Abstracts of Current Literature

Submitted by FACULTY OF FOOD SCIENCE, University of Toronto

The changing roles of women

H. I. BROWN, L. LEMON AND S. LIPPEAT

1966. *Illinois Teacher of Home Economics*, 10 (2):24

Women's roles in life have passed through an ever evolving period of change. The early pioneer era saw these roles centered around the home, however, the industrial revolution brought with it what one could call an emancipation from the home. Another factor which has affected women's role is politics and world affairs. World Wars I and II created quite a new outlook for women, taking them into the labor world, side by side with men.

Statistics have shown that: "women make up 35 per cent of the total labor force; 37 per cent of all women in the U.S. work; 34 per cent of all married women work; working mothers represent 38 per cent of all women who work."

This changing status of women presents a challenge to today's educators. The grim reality of the work-a-day world has to be brought to the attention of today's students. No other discipline is more unique in presenting these facts than the field of home economics. Courses such as family relationship and management of resources could be integrated into home economics courses in secondary schools emphasizing the importance of family life education for all, the need for learning how to make use of leisure time and the need for continued and higher education.

It is difficult to predict what opportunities the future holds for any one student, however, today's home economics educators can help students learn to learn and be ready to face some of the problems of the ever-changing technological and social world.

A new town that conserves the landscape

PAUL RUDOLPH

1967. *Architectural Record*, 141:151

Stafford Harbor, Virginia, is a new town that will be located on the Potomac River about 38 miles south of Washington, D.C. Designed by Paul Rudolph it reinforces the natural topography by placing the major group of buildings along the ridges and harbor, leaving the intervening valleys free.

The valleys between the ridges are to be devoted to schools and recreation areas; and the hill and valley motif has been brought down into the marina as well. The housing is placed along the water and built up into a triangular section, having the administration

centre placed over a podium containing various recreation facilities. Each cluster of housing is in itself a little hill made up of row houses that are backed up against a garage, with an apartment tower above. The clusters have sloping roofs, terraces and a stepped-back section integrating both high and low-rise elements into a single composition. The core between the step-back sections is a two level parking garage. Two parking places are provided for every housing unit with two-thirds of these being in garages. Access roads run through the garages linking the housing clusters together. Apartments along the shore have stepped-back configuration which gives each unit what should be a well protected terrace. The total arrangement appears to offer a wide range of adjustment to both landscape and family life.

The area is farther from Washington than the average present-day suburb, but there are already good highway connections and a near-by railway line. The possible use of hydrofoil or hovercraft on the Potomac could bring Washington even closer to Stafford Harbor, thus giving the area a future as a suburb and retirement community as well as a resort.

Although the whole design may not be built, Rudolph has clearly established a basic concept that is capable of guiding the course of future development for such an area and thus serve as one of the possible prototypes for a new kind of higher density living that seems inevitable in the face of continued population growth.

Jute — new visions for an old fibre

F. K. BURR, K. R. FOX AND J. S. PANTO

1966. *Textile Research Journal*, 36:794-799

The very rapidly expanding tufted-carpet industry has followed traditional practice in adopting jute as its most important carpet-backing material. Jute has more than cost advantages over synthetic fibres tried in this use.

When compared to polypropylene backing, jute has greater tuft-holding power and greater flexural rigidity. Through these characteristics, it enhances the general serviceability of the carpet, which is manifested in better resistance to pile tuft deformation and pile parting or "grinning."

Cost and weight dependence is less critical with jute than with a synthetic fibre, which makes it possible to increase fabric bulk without greatly disturbing production cost balance. Jute-backed carpet is therefore made a little

heavier and has a more substantial feel, a characteristic generally appreciated in pile floor coverings.

Because of its favorable effect on bulk, in double-backed carpets, jute may be introduced as a secondary backing over a polypropylene primary backing. This practice, however, disregards a basic difference in the mechanical characteristics of the two materials. Because of a difference in fibre extensibility, a jute-polypropylene combination cannot function as effectively under stress as a carpet double-backed with jute. This has a practical significance in wall-to-wall carpet installations where carpeting is exposed to the action of mechanical stretchers.

The Indian Jute Mill Association (I.J.M.A.) is currently sponsoring studies to establish the more important performance factors of jute fabrics and to seek improvements in available products. Colored jute fabrics are valuable in interior decoration but more advanced processing techniques are necessary to improve their light fastness performance.

New processing developments will undoubtedly extend the range of yarn counts and create new decorative jute fabrics.

There are new possibilities for jute utilization in industrial materials; jute has definite advantages in certain types of coated fabrics and, like Fiberglas, it can be used as reinforcement in rigid laminates.

To support these programs, the I.J.M.A. and the Government of India are sponsoring improved jute cultivation, and it is expected that yields of better quality fibre will tend to increase in the near future.

Effect of trivalent chromium on glucose tolerance

W. H. GLINSMANN AND W. MERTZ

1966. *Metabolism*, 15:510

Chromium deficiency in rats has been observed to result in a diabetic-like syndrome, with depressed growth and longevity. Administration of trace amounts of trivalent chromium to chromium-deficient rats will correct the impaired glucose tolerance.

The authors investigated the effect of both short-term and long-term chromium (III) supplementation on the impaired glucose tolerance of 14 well-controlled human diabetics and on the normal glucose tolerance of 10 non-diabetic subjects.

Short-term supplementation for 1 to 7 days at 2 levels of chromium (60 μg and 1 mg 3 times a day) failed to significantly alter the impaired glucose tolerance of 7 diabetics. With prolonged chromium supplementation (15 to 133 days) a statistically significant ($P=0.05$)

improvement in glucose tolerance was observed in 3 out of 6 diabetics. In a fourth subject, chromium supplementation for more than 133 days was completely ineffective, even when doses as high as 333 μg 3 times a day were administered. In all patients exhibiting a positive chromium response, glucose tolerance returned to impaired control levels upon cessation of chromium administration, the length of time taken for this varying with the individual. The observed chromium effect was not associated with increased glycosuria.

In 10 non-diabetics chromium supplementation of 150-1,000 μg per day for up to 3 weeks had no significant sustained effect on glucose tolerance. These observations with normal subjects suggest the role of chromium in man is similar to that in the rat in that a chromium effect is seen only in a deficiency state, with no further improvement in glucose tolerance observed once normal values are attained.

The authors considered chromium administration a dietary supplement which corrects a suboptimal intake of this micro-nutrient. They emphasize that chromium cannot be classified as a hypoglycemic agent, nor can it be used as an insulin substitute. Its action appears to be that of a cofactor for the insulin-membrane interaction which functions only in the presence of insulin.

Where diabetes is complicated by a dietary deficiency of chromium, supplementation can be expected to improve only that part of the metabolic defect due to this nutritional inadequacy. In addition, not all cases of diabetes appear to be complicated by a chromium deficiency.

In view of the fact that old age is known to be associated with decreasing tolerance to glucose and since it has recently been shown (Schroeder & Balassa, 1962) that the chromium content of various human tissues decreases from birth to old age, further investigation of the possible effects of chromium on the chronic, degenerative changes of old age, often associated with diabetes is warranted.

The skid resistance of wood floor finishes

K. W. SMYTHE AND S. D. DAY

1967. *Journal of Home Economics*, 59: 163

Accidents involving slips and falls on floors are usually attributed to the floor material and its condition, with little or no attention being paid to heel materials.

This study was designed to (a) determine the coefficient of friction of wood floor finishes tested with different heel materials; (b) to investigate the effect of waxes and moisture



DEPARTMENT OF PUBLIC HEALTH
PROVINCE OF NOVA SCOTIA

Requires the services of a

CHIEF DIETITIAN

Point Edward Hospital — Point Edward, Cape Breton, Nova Scotia

QUALIFICATIONS: B.Sc.; Dietetic Internship and three years' experience.

DUTIES: Responsible for dietary department of 150-bed Tuberculosis Hospital located near Sydney, Nova Scotia.

SALARY: Commensurate with qualifications and experience.
Full Civil Service benefits.

Further information is available from Medical Superintendent, Point Edward Hospital, Point Edward, Nova Scotia.

Application forms may be obtained from the Nova Scotia Civil Service Commission, P.O. Box 943, Dennis Building, Halifax, Nova Scotia or the Provincial Building, Sydney, Nova Scotia.

on the coefficient of friction of the floor finish and heel materials, and (c) to compare the coefficient of friction of new, worn and polished wood floor finishes. Seven wood floor finishes, four waxes and five heel materials were tested under both dry and wet conditions. Coefficients of kinetic friction were determined with the Bowen Friction Tester from equation $\mu K = F/M$ in which μK = coefficient of kinetic friction, F = force of friction and N = normal force between the heel and floor materials.

In this research a coefficient of friction of 0.40 is the numerical value below which a surface would be considered slippery and above which it would be considered safe. Using this criterion none of the seven floor finishes were considered safe under all conditions but results indicate that for most surface conditions (1) crepe heel material gave friction values well above 0.40 and was considered highly skid resistant; (2) leather gave friction values much below 0.40 and was considered slippery; (3) rubber nylon and neolite ranked between crepe and leather and when dry were considered safe, however rubber and neolite were slippery on a wet floor waxed with a solvent-based wax. Nylon gave friction values above 0.40 for dry finishes except when a liquid solvent-based wax was used. On a wet surface nylon was slippery when the floors

were finished with either the liquid or paste solvent-base waxes.

Evidence is presented that skid resistance depends to a considerable extent on heel materials in contact with floor finishes and to a lesser extent on the surface condition of the floor finishes. Floors waxed with paste and liquid solvent-base waxes tend to give low coefficients of friction and would be slippery when wet and in combination with leather heels especially, would not be skid resistant. Safety measures would warrant consumer attention to skid resistance when selecting a wax for a floor in areas where water may be spilled or tracked in. The self-polishing wax gave relatively high friction values, above 0.50 for both dry and wet conditions. These values were comparable to an unwaxed wooden floor.

SCHOLARSHIP FUND

The successful HEIB Cook Book Project has raised the C.H.E.A. Scholarship Fund past the half-way mark of its \$50,000 objective. Some time has elapsed since the membership received a reminder about the need to build up the Fund. The Fund is always open. Please mail your donation to the National Office.

CANADIAN HOME ECONOMICS JOURNAL

CANADIAN HOME ECONOMICS ASSOCIATION

Past President.....Mrs. Norah M. Holcomb,
30, 900 Sherbrooke St. W.,
Montreal 2, Que.

President.....Miss Wanda Young,
16 Cornwall Court,
Regina, Sask.

President Elect.....Miss Sally Henry,
Maple Leaf Mills Limited,
43 Junction Road,
Toronto 9, Ontario.

Vice-President.....Mrs. W. L. Oddie,
Tregarva, Sask.

Secretary.....Miss Isabel Bailey,
3504 Allen Avenue,
Regina, Sask.

Treasurer.....Miss Lois Hurst,
Consumer Section,
Canada Department of
Agriculture,
Ottawa, Ontario.

CLASS "A" DIRECTORS Term of Office Expires 1968

British Columbia:
Mrs. Arthur E. Taylor,
7207 Arcola St.,
Burnaby 1, B.C.

Alberta:
Mrs. D. E. MacDongall,
331 - 46th Ave. S.W.,
Calgary, Alta.

Ontario:
Miss Margaret Myer,
Dept. of Fisheries,
Confederation Heights,
Ottawa 8, Ont.

Nova Scotia:
Miss Jessie Rae,
Department of Health,
Box 488,
Halifax, N.S.

Prince Edward Island:
Mrs. D. C. Matheson,
Oyster Bed Bridge, P.E.I.

CHAIRMEN OF COMMITTEES

College Clubs:
Miss Marjorie Guilford,
College of Home Economics,
University of Saskatchewan,
Saskatoon, Sask.

Extension:
Miss Janet Walker,
N.S. Department of Agriculture
and Marketing,
Research Station, Kentville, N.S.

Family Life:
Mrs. W. A. Seaman,
Mount Allison University,
Sackville, N.B.

Foods and Nutrition:
Dr. Shirley Weber,
School of Home Economics,
University of Manitoba,
Winnipeg 19, Man.

Public Relations:
Miss Wendy Sanford,
Corning Glass Works of Canada Ltd.,
Toronto 17, Ont.

Award Selection:
Past President.

CLASS "B" DIRECTORS Term of Office Expires 1967

Saskatchewan:
Mrs. A. Whitmore,
16 Dunning Crescent,
Saskatoon, Sask.

Manitoba:
Miss Elizabeth M. Collyer,
Department of Agriculture,
715 Norquay Building,
Winnipeg 1, Man.

Quebec:
Miss Mary Baker,
6187 Terrehonne Ave.,
Montreal 28, Que.

New Brunswick:
Miss Beatrice Mahoney,
Teachers' College,
Fredericton, N.B.

Newfoundland:
Mrs. Gordon MacDonald,
8 Rostellan,
St. John's, Nfld.

CHAIRMEN OF COMMITTEES

Education:
Miss A. Berneice MacFarlane,
10260 Wadhurst Rd.,
Edmonton, Alta.

HEIB:
Miss Frances Little,
1507, 1280 St. Marc St.,
Montreal 25, Que.

Journal:
Miss Donna Baxter,
196 Enfield Crescent,
St. Boniface 6, Man.

Membership:
Miss Edith Bradbrooke,
1401 Elliott St.,
Saskatoon, Sask.

Textiles and Clothing:
Miss Grace C. Frank,
Macdonald Institute,
University of Guelph,
Guelph, Ont.

when a low cholesterol diet is indicated...

FLEISCHMANN'S 100% CORN OIL MARGARINE OFFERS THESE ADVANTAGES:

it has a polyunsaturates to saturated fats ratio of 1.5

it is especially suitable for people who are attempting to regulate the type of fat in their diet

made from pure corn oil only (no mixture of oils)

Fleischmann's Margarine contains almost a full cup of liquid corn oil per pound. Because it is made from pure corn oil, it has a light, delicate flavor. And Fleischmann's always spreads smoothly, even when it's

cold. This unique margarine exceeds the requirements suggested by many heart authorities for an acceptable margarine for use in diets to lower serum cholesterol.



A new full-colour publication, "Dietary Fat Guide & Recipe Booklet", is available to doctors, dieticians and home economists. Write to: Standard Brands Limited, 550 Sherbrooke St. West, Montreal, Quebec.